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ABSTRACT

The Intermediate and Secondary Language Development Component, funded under Title I of the 1965 Elementary Secondary Education Act, has the following objectives: (1) to help the underachieving pupil, grades four to 12, improve his reading achievement; (2) to help the intermediate level (grades four to six) underachieving pupil to become more successful in his regular reading class work; and, (3) to help the intermediate level underachieving pupil develop more positive motivations toward reading. Thirty public schools of the Columbus Public School District and four Diocesan schools were served by this component. The curriculum included numerous activities under the categores of motivation, motor activities, visual discrimination, auditory perception, listening, sight vocabulary, word analysis, comprehension, phonics, and study skills. There was consultation with classroom teachers about individual pupils. Pupil selection was made on the basis of a comparison of obtained versus expected reading scores on the Gates-MacGinitie Reading Test--for fourth graders, or the Nelson Reading Test, for fifth or sixth graders. The 35 pupils who demonstrated the largest discrepancy and who were also below age level were selected for further diagnosis and instruction. (Author/JM)

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FINAL REPORT

1969-70 LANGUAGE DEVELOPMENT

INTERMEDIATE AND SECONDARY

Prepared by:

Robert J. Rodosky, Evaluation Specialist

With the Assistance of:

Catherine M. Feike, Evaluation Specialist

Under the Supervision of:
Calvin M. Smith, Jr.
Supervisor, State and Federal Evaluations

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INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT COMPONENT

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FINAL REPORT
1960-70 LANGUAGE DEVELOPMENT
INTERMEDIATE AND SECONDARY

Section I - Audiences to be Served by the Evaluation

This report is written in order that the Intermediate and Secondary Language Development teachers, administrative personnel in the Department of Special Program Development of the Division of Instruction, and the members of the Board of Education may become informed about the outcomes of the component.

Section II - Specification of the Component

A. Educational Philosophy Behind the Component

The philosophy behind the Intermediate and Secondary Language Development Component is the following:

The stated intent of the language development effort would be to better service the educational needs of disadvantaged children.

> "Teachers' observations of language facility reinforce the expressed need for a reoriented language development program (reading, listening, speaking, perceiving, writing). Research indicates that compensatory programs have more opportunity to be productive if started early in the elementary years before negative attitudes toward education have set in. Dropout, failure, negative self-concept are interrelated and dependent (in a majority of cases) on extent of language power and success in dealing with the school program. After identifying the verbal equipment and experiential background that the disadvantaged child brings to school, it readily becomes apparent that the task of the schools is one of providing for the needs and differences of these children through enrichment services and activities as possible in one area of the child's social experiences--language.[1]
>
> "Another reason, or need, for the project is that most academic teachers feel insecure in teaching reading and need an in-service program that will help them overcome this insecurity. A National Council of

[1] Language Development and Mathematics Improvement Funding Proposal; The Columbus Public Schools, 1969, p. 23.

> Teachers of English study in 1960 revealed that 50% of upper-elementary grade teachers and over 90% of secondary teachers do not feel qualified to teach reading. Class size, other teacher responsibilities, lack of time, training, and materials, limit the classroom teacher in providing specialized reading instruction, and very few reading specialists are available."[2]

B. Curriculum

The following are categories under which pupils perform numerous activities: motivation, motor activities, visual discrimination, auditory perception, listening, sight vocabulary, word analysis, comprehension, phonics, and study skills.

C. Learning Objectives

The Intermediate and Secondary Language Development Component has the following objectives:

Objective 1. To help the underachieving pupil (grades 4-12) improve his reading achievement.

Objective 2. To help intermediate level (grades 4-6) underachieving pupil to become more successful in his regular reading class work.

Objective 3. To help the intermediate level (grades (4-6) underachieving pupil develop more positive motivations toward reading.

D. Instructional Procedures, Media, Tactics

Implementation of the broad objectives stated above was accomplished through use of a wide variety of teaching methods and materials. Consultation with classroom teachers about individual pupils provided a basis for remediation techniques and materials to be used.

E. Pupil Selection

At the elementary level, the following pupil selection process was used. In September, all fourth grade pupils in the target schools previously listed were given the Gates-MacGinitie Reading Test, Survey D, and all pupils in grades

[2] Operational Guideline, Reading Improvement Project; The Columbus Public Schools, 1969, p. 1.

five and six were given the Nelson Reading Test, Form A or B. On the basis of standardized test data from the Gates-MacGinitie and Nelson reading tests and the most recent measure of academic aptitude, reading improvement teachers determined the reading expectancy of each pupil tested. Pupils were then ranked in order of increasing discrepancy between achievement and potential. The thirty-five pupils who demonstrated the largest discrepancy and who were also below age level were selected for further diagnosis and instruction. Pupils were retested in January, May and August to determine whether they required additional remedial instruction.

The retesting occurred at the termination of a cycle; that is, the regular school year was divided into two cycles, each approximately five months long. Summer school was considered the third cycle.

At the end of each of these cycles, the language development teacher was in a position to alter the composition of his classes, based on the degree to which the pupils enrolled had eliminated their reading deficiencies. Those who had not made sufficient progress were retained for the subsequent cycle; those who had created vacancies to be filled in the new class roster. However, teachers were encouraged to retain pupils through the two cycles to insure retention of grade level achievement.

Seventh, eighth, and ninth graders were pre-tested with the Nelson Reading Test, Form A or B. Pupils were then selected in the same manner as were the elementary pupils. The junior high reading teacher had a maximum of fifty pupils daily. A cycling schedule comparable to that at the elementary level was employed.

Tenth graders were pre-tested with the Gates-MacGinitie Reading Test, Survey E, and selected in a similar manner as the elementary and junior high pupils. The reading teacher was permitted to handle a maximum load of fifty pupils per day. At any time during the year, teachers or counselors could recommend a pupil from any senior high grade for diagnosis and possible inclusion in the component.

F. Instructional and Community Setting

Thirty public schools of the Columbus Public School District and four Diocesan schools were served by this component. Twenty-two of the public schools were elementary schools--Beatty Park, Beck Street, Clearbrook, Douglas, Eleventh Avenue, Fair Avenue, Felton, Fulton, Garfield, Hamilton, Lincoln Park, Livingston, Main Street, Milo, Ohio Avenue, Pilgrim, Reeb Avenue, Second,

Sullivant, Trevitt, Weinland Park, and Windsor. Seven were junior high schools--Champion, Everett, Franklin, Linmoor, Mohawk, Monroe, and Starling. East was the only participating high school. Fifteen of the above mentioned elementary schools had two full-time language development teachers. The remaining seven elementary schools and the eight junior and senior high schools had one full-time language development teacher. The four Diocesan schools were Holy Rosary, Rosemont, Sacred Heart and Saint John The Evangelist.

Forty-four teachers taught in the Language Development Component. There were two full-time teacher co-ordinators in the component. The duties of the teachers were as follows:

1. Assisted in the school-wide testing program, which served as a basis for screening pupils.

2. Directed and conducted diagnoses for individual pupils who appeared to be reading at levels below their anticipated ability.

3. Interpreted the results of diagnoses to faculty members, parents, and, in some cases, to pupils themselves.

4. Helped regular classroom teachers and teachers in below-average classes to make use of the data from diagnoses.

5. Instructed and guided pupils individually or in small groups if they read at levels well under what their ability indicates they can achieve.

6. Kept records of the pupils who received special services, charted their progress, and indicated areas which need further work.

7. Communicated regularly with the classroom teacher concerning the methods tried and the progress made with each pupil.

8. Maintained a well-organized and adequate supply of books, materials, and supplies so that he could recommend and provide for individual needs quickly and efficiently.

9. Supplied materials to other teachers when they requested it or suggested materials that might be appropriate for a particular pupil or class.

10. Kept the faculty and administrators up-to-date on new developments and research in reading and on experimentation in other schools.

11. Analyzed new books and materials that could be used in the reading program and recommended useful ones to the project supervisor.

12. Participated in parent conferences concerning reading, if requested to do so.

The forty-four teachers served for thirty-nine weeks on a full-time basis.

In the service and supporting relationship to teachers and principals, the two program coordinators would engage in such activities as:

A. Implementing language development through:

   1. Dissemination of ideas and materials.

   2. Regular and continuous scheduling of conferences and visitations to building units.

   3. Direct help to classroom teachers and language development teachers through teaching demonstrations and work periods.

B. Building language development image through:

   1. Clarification of goals and roles.

   2. Encouragement of more effective planning and cohesion within building units.

   3. Encouragement of positive human relations.

C. Communicating information to building units and to project staff.

D. Participating in the planning and conducting of professional growth activities within a given school and on a project-wide basis.

E. Developing materials when necessary.

F. Hosting visitors who desire to see the language development approach in action.

G. Making recommendations concerning all aspects of the project, with particular emphasis upon curricular content, instructional methods, materials and professional growth activities.

H. Plan parent participation activities.

G. Standards, Bases for Judging Quality

Objective 1. To help the underachieving pupil (grades 4-12) improve his reading achievement; such that, if successful, the pupil will make satisfactory progress toward raising his level of grade placement in reading vocabulary and comprehension. Satisfactory progress shall be defined as the amount of change in grade placement which is greater than that which normally would be expected on a pre-post administration of the reading sub-test of the California Test of Basic Skills. Normal expectation will be considered to be the average yearly progression of each pupil in reading achievement in addition to his pre-test grade placement, e.g., a fifth grader achieving at 3.5 at entrance in the fifth grade has an average achievement progression of 0.7. His normal expected placement at the end of the fifth grade would be 4.2 (3.5 + 0.7). The degree to which this objective is realized will be the percentage of component enrollees who surpass expected levels of grade placement in one of the two reading achievement areas previously mentioned.

Objective 2. To help the intermediate level (grades 4-6) underachieving pupil become more successful in his regular reading class work. There is no criterion.

Objective 3. To help the intermediate level (grades 4-6) underachieving pupil develop more positive motivations toward reading; such that, if successful, the pupil will perform classroom learning activities at an increased frequency.

Section III - Program Outcomes

A. Opportunities, Experiences Provided Pupils

The Intermediate and Secondary Language Development teachers attempted to help component pupils on two levels:

1. Vocabulary and comprehension skills which the pupil was encountering in his regular class.

2. Vocabulary and comprehension skills which the pupil should have mastered in earlier school experiences. The proportion of time spent on the two levels depended on the severity of the problem of each individual pupil and, therefore, varied from pupil to pupil.

To serve individual pupil needs, the Intermediate and Secondary Language Development teacher maintained an adequate supply of books and materials. The component pupils utilized the books and materials for their benefit under the supervision of the component teacher.

B. Pupil Achievement Data

The data of the component is reported in two sections. The first section (denoted as Section A) only includes data for the 1969-70 regular school year. The second section (Section B) reports on the 1970, Summer School Intermediate and Secondary Language Development Program. Section B also includes achievement data on pupils who participated in both the regular 1969-70 school year and 1970 summer school component.

In both sections, the data is described and presented as simply as possible. Both sections include an interpretation of the data.

1. Section A - 1969-70 School Year

Objective 1. To help the underachieving pupil (grades 4-12) improve his reading achievement.

Criterion: The degree to which this objective is realized will be the percentage of component enrollees who surpass expected levels of grade placement in one of the two reading achievement areas--vocabulary and comprehension.

INSTRUMENTATION

California Test of Basic Skills

Sample: All component enrollees

Administration: Pre-post test administration in October, 1969 and May, 1970.

Analysis: Frequency distributions by grade level and grade placement.

Results: Table 1 illustrates the number of pupils in each grade level whose change in grade placement was greater than that which was normally expected on a pre-post administration of the reading sub-test of the California Test of Basic Skills (CTBS). Normal expectation was defined as the amount of change in grade placement which is greater than that which normally would be expected on a pre-post administration of the reading sub-test of the CTBS. Normal expectation was considered to be the average yearly progression of each pupil in reading achievement in addition to

TABLE I

NUMBER OF COMPONENT ENROLLEES BY GRADE LEVEL WHO SURPASSED NORMAL EXPECTATIONS OF ACHIEVEMENT IN THE TWO AREAS OF THE READING SUBTEST OF THE CALIFORNIA TEST OF BASIC SKILLS

Grade	N[a]	Vocabulary	Comprehension
4	400	220	198
5	370	121	152
6	313	120	122
8	215	135	138
Total	1298	596	610

[a] N's are for matched pre and post-test scores.

his pre-test grade placement, e.g., a fifth grader achieving at 3.5 at entrance in the fifth grade has an average achievement progression of 0.7. His normal expected grade placement at the end of the fifth grade would be 4.2 (3.5 + 0.7).

In the fourth grade, more component pupils surpassed normal expectation in the area of vocabulary than in the area of comprehension. However, in the fifth grade, the reverse was true; that is, more component pupils surpassed normal expectation in comprehension than vocabulary. In the sixth and eighth grade, an almost equal number of pupils surpassed normal expectation in the two areas.

In both vocabulary and comprehension, the total number of pupils who surpassed normal expectation was approximately the same (596 vs. 610).

Over one-half the component pupils in the fourth grade and the eighth grade surpassed normal expectation in vocabulary while more than one-half the eighth graders did the same in comprehension.

The criterion for Objective I was the percentage of component enrollees who surpassed expected levels of grade placement in one of the two reading achievement areas previously mentioned. Table 2 organizes the data for examining the extent to which Objective I was achieved. Because a total percentage of component enrollees who surpassed expected levels of grade placement was needed, Table 2 is organized in a way in which all the component pupils who were pre- and post-tested are divided into three mutually exclusive groups. Group I contains pupils who surpassed expected levels of grade placement in only vocabulary. Group II contains pupils who surpassed expected levels of grade placement in only comprehension. Group III contains pupils who surpassed expected levels of grade placement in both vocabulary and comprehension. The areas of vocabulary and comprehension are areas of the reading sub-test of the California Test of Basic Skills.

A total number of pupils who surpassed expected levels of grade placement in one of two areas is computed by adding the three groups within each grade level. A total percentage of improvement is computed within each grade level by dividing the total number of pupils who surpassed expected levels of grade placement in one of two areas for the grade level by the number of pupils in the component in that grade level (N).

TABLE 2

NUMBER AND PERCENTAGE OF COMPONENT ENROLLEES WHO SURPASSED EXPECTED LEVELS OF GRADE PLACEMENT AS MEASURED FROM PRE-TEST TO POST TEST IN ONE OF TWO AREAS ON THE READING SUB-TEST OF THE CALIFORNIA TEST OF BASIC SKILLS

Grade	N[a]	I Improvement in Vocabulary	II Improvement in Comprehension	III Improvement in Vocabulary and Comprehension	Total	Total Percentage of Improvement
4	400	104	82	116	302	75.5
5	370	60	91	61	212	57.3
6	313	63	65	57	185	59.1
8	215	37	40	98	175	81.4
Total	1298	264	278	332	874	67.3

[a] N's are for matched pre and post-test scores.

An examination of Table 2 reveals that within grades four and eight more pupils surpassed normal expectation in vocabulary and comprehension (Group III) than in only one area (Group I or Group II). However, in grades five and six more pupils exceeded normal expectations in comprehension (Group II) than in either vocabulary (Group I) or vocabulary and comprehension (Group III).

Every grade level had at least half of the pupils achieving the criterion for success. Fourth grade and eighth grade attained the most success within the component. At least three-fourths of the pupils in these grades achieved success. Finally, the combined grade level proportion of 67.3 percent is encouraging.

The component achieved Objective 1.

Objective 2. To help intermediate level (grades 4-6) underachieving pupil become more successful in his regular reading class work.

Criterion: There is no criterion. However, to examine the objective, an analysis was performed on achievement data from the California Test of Basic Skills. The emphasis of the examination will be on how far the component pupils are behind in achievement on the California Test of Basic Skills in comparison with the grade level norms of the test.

INSTRUMENTATION

California Test of Basic Skills

Sample: All component enrollees of grades 4-6

Administration: Same as in Objective 1.

Analysis: Distribution graphs and contingency tables by grade level.

Results: In evaluating Objective 2, an examination was conducted on the pre- and post-test data of the California Test of Basic Skills. The examination used as a reference point the number of months a component pupil was below in grade level achievement from the national norm; i.e., if 10 months are considered a school year, then a student entering the fourth grade is expected to be achieving at forty months or 4.0 years. However, if that pupil is achieving at 32 months (3.2 years) then he is 8 months (.8 years) behind the national

expected norm. In a similar manner, a pupil who takes the CTBS in May is expected to be achieving at 49 months (4.9 years) on the national norms. If the pupil, however, scores a 3.7 on the May test, then he is considered to be 12 months (1.2 years) behind the national norm.

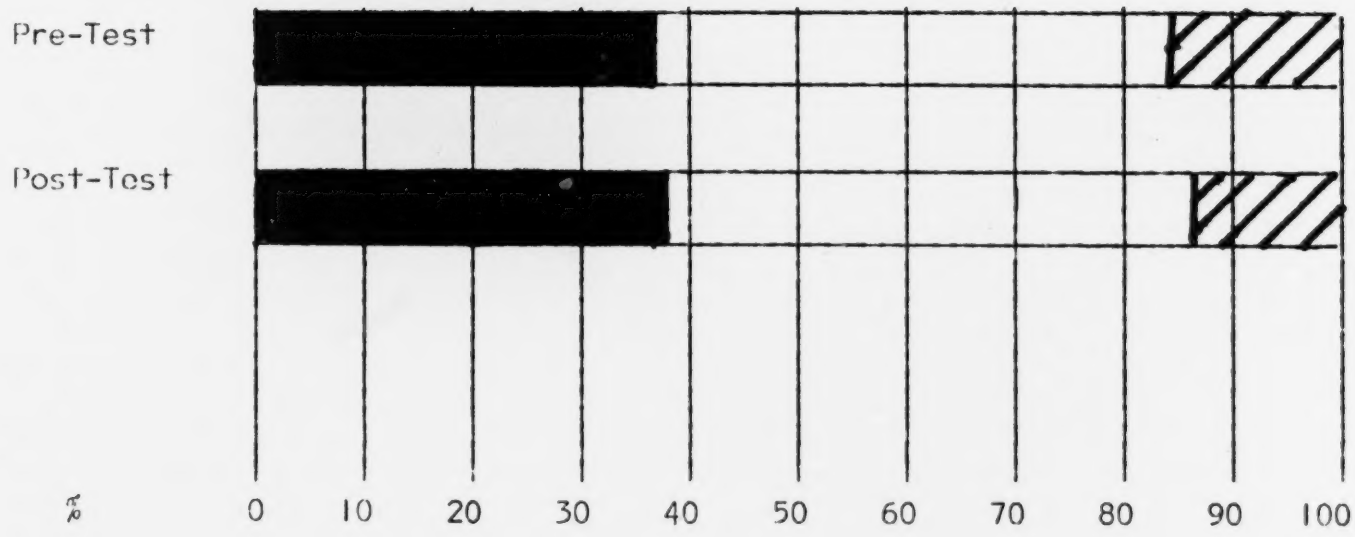
For analysis purposes, years instead of months were used. To convert months into years, divide the number of months by 10 (years = months/10).

Figures 1-6 compare the pre-post test percentage of component pupils behind in expected grade level by grade level. Figures 1-3 display the percentage of component pupils behind grade level in vocabulary. Figures 4-6 display the pre-post test percentage of component pupils behind in grade level in comprehension.

In vocabulary, fourth grade component pupils appear to be the only subgroup of pupils to improve from pre-test to post-test. The percentage of fourth grade component pupils who were achieving at one or less years behind in grade level increased from 37 percent to 38.5 percent (gain of 1.5 percent). Also, the percentage of fourth grade component pupils achieving at 2 or more years behind in grade level decreased from 16 percent on the pre-test to 13 percent on the post-test (3 percent of the pupils improved).

However, more fifth and sixth grade pupils appeared to be achieving at two years or more behind grade level on the post-test than on the pre-test. The percentage of fifth graders achieving two or more years behind in grade level increased from 22 percent on the pre-test to 58 percent on the post-test. Similarly the percentage of sixth grade component pupils achieving at two or more years behind in grade level increased from 51 percent on the pre-test to 67 percent on the post-test.

In comprehension, the pattern from pre-test to post-test for all grades was similar to the pattern for fifth and sixth graders in vocabulary. With one exception, the percentage of pupils achieving at two or more years behind in grade level increased from pre-test to post-test in all grade levels while the percentages in the other two areas (one or less years behind in grade level and more than one year but less than two years behind in grade level) decreased from pre-test to post-test. The one exception occurred in the fourth grade. The percentage of component pupils in the fourth grade who were more than one year but less than two years behind in grade level increased from 36 percent to 41 percent. However, this increase in percentage may have come from the percentage decrease of component pupils who were less than or equal to one year behind in expected grade placement.

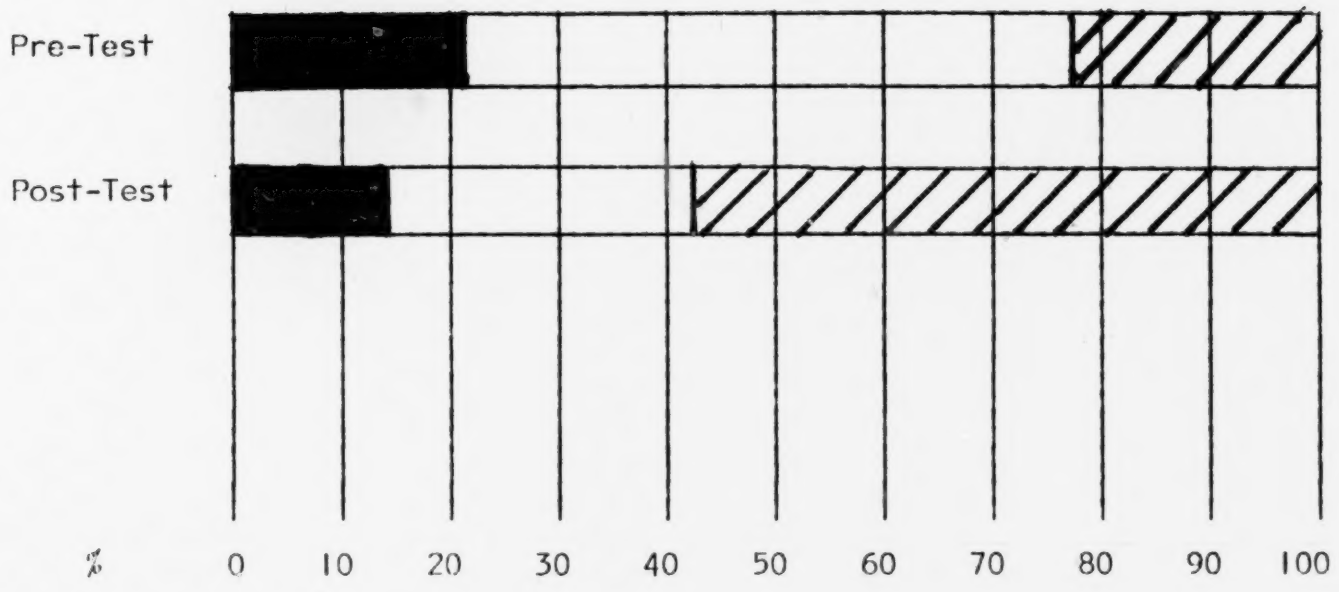


≤ 1 year behind grade level

1.1-1.9 years behind grade level

≥ 2.0 years behind grade level

Fig. 1. Distribution of fourth grade pupils behind in grade level on the vocabulary section of the reading sub-test of the California Test of Basic Skills.

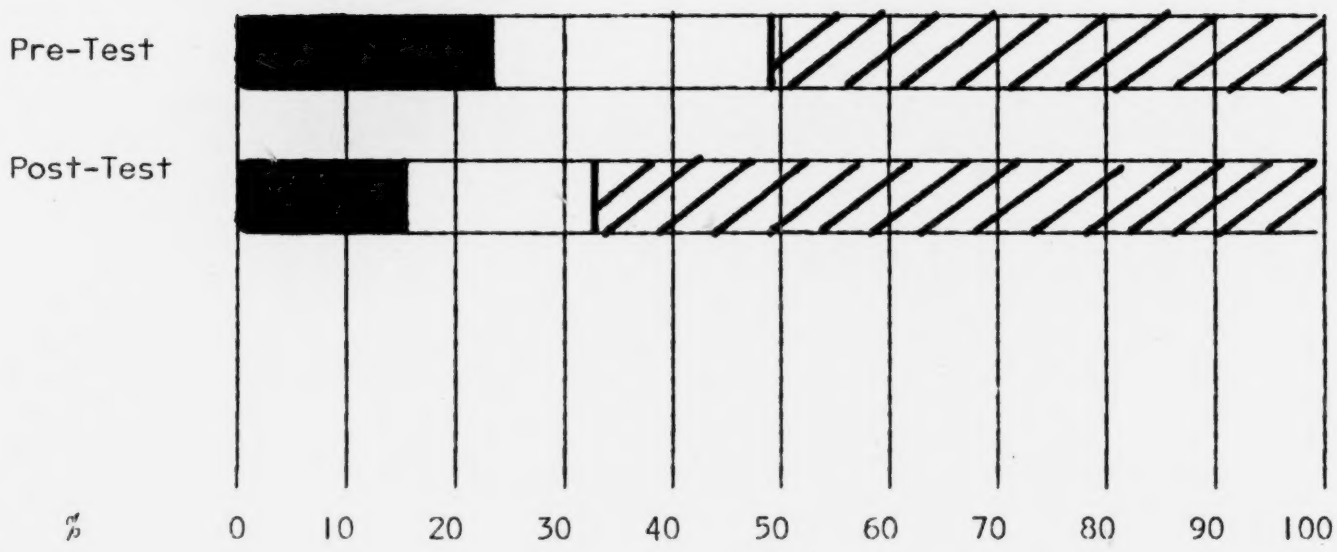


≤ 1 year behind grade level

1.1-1.9 years behind grade level

≥ 2.0 years behind grade level

Fig. 2. Distribution of fifth grade pupils behind in grade level on the vocabulary section of the reading sub-test of the California Test of Basic Skills.

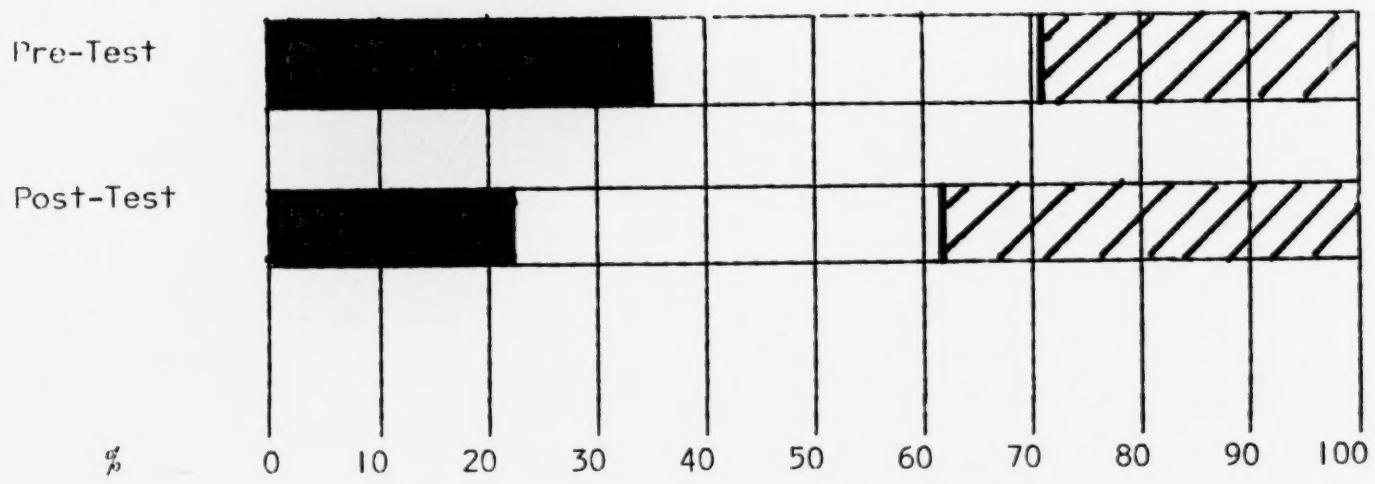


≤ 1 year behind grade level

1.1-1.9 years behind grade level

≥ 2.0 years behind grade level

Fig. 3. Distribution of sixth grade pupils behind in grade level on the vocabulary section of the reading subtest of the California Test of Basic Skills.

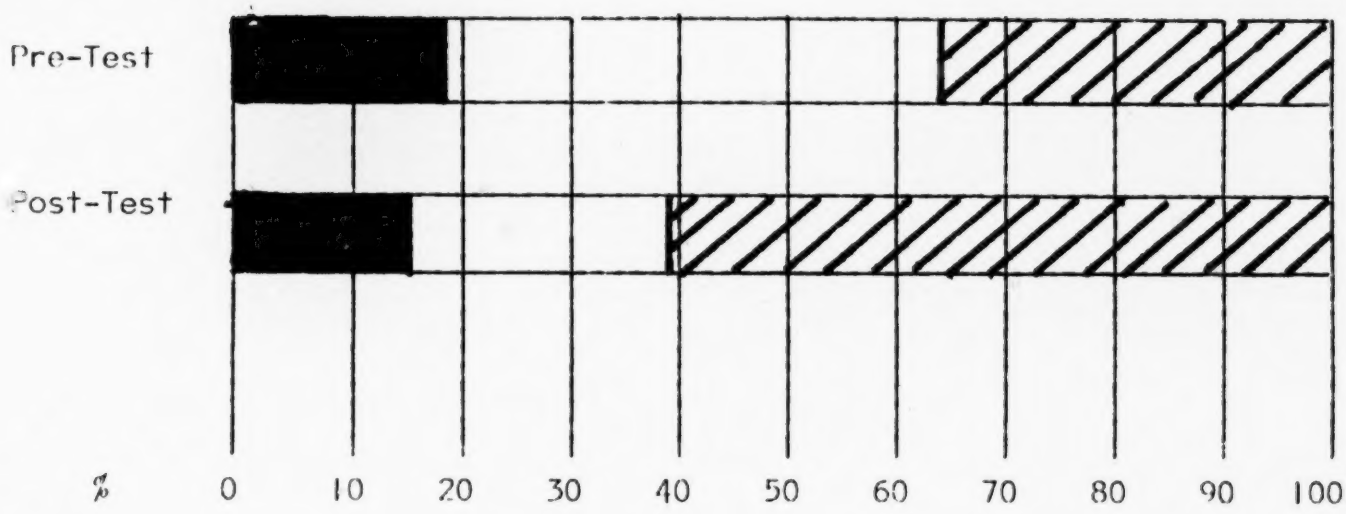


≤ 1 year behind grade level

1.1-1.9 years behind grade level

≥ 2.0 years behind grade level

Fig. 4. Distribution of fourth grade pupils behind in grade level on the comprehension section of the reading subtest of the California Test of Basic Skills.

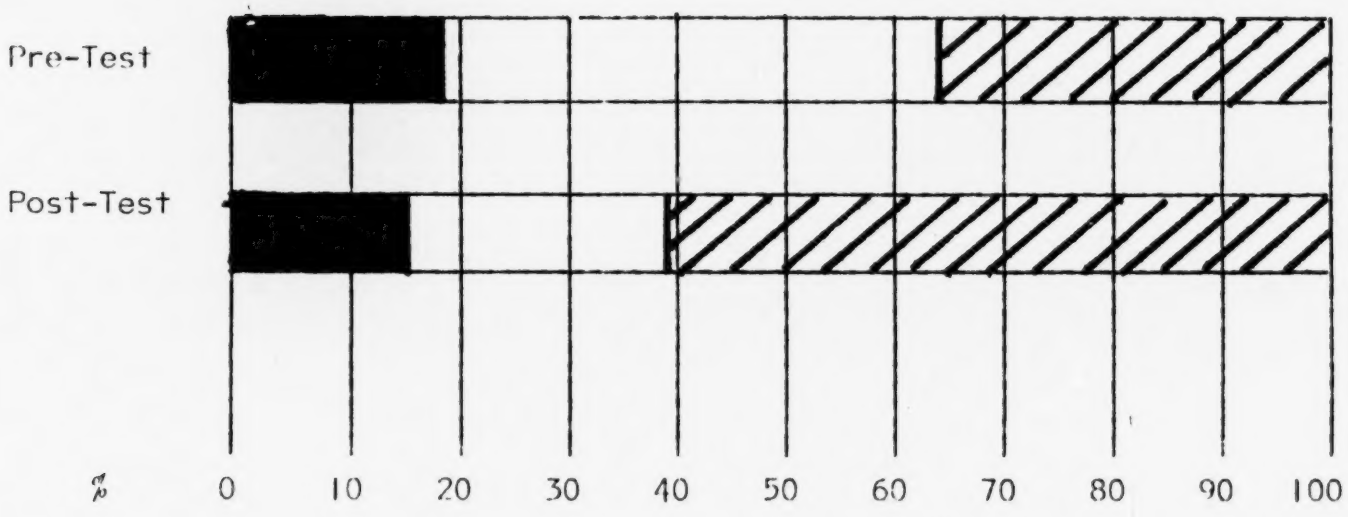


≤ 1 year behind grade level

1.1-1.9 years behind grade level

≥ 2.0 years bebind grade level

Fig. 5. Distribution of fifth grade pupils behind in grade level on the comprehension section of the reading sub-test of the California Test of Basic Skills.

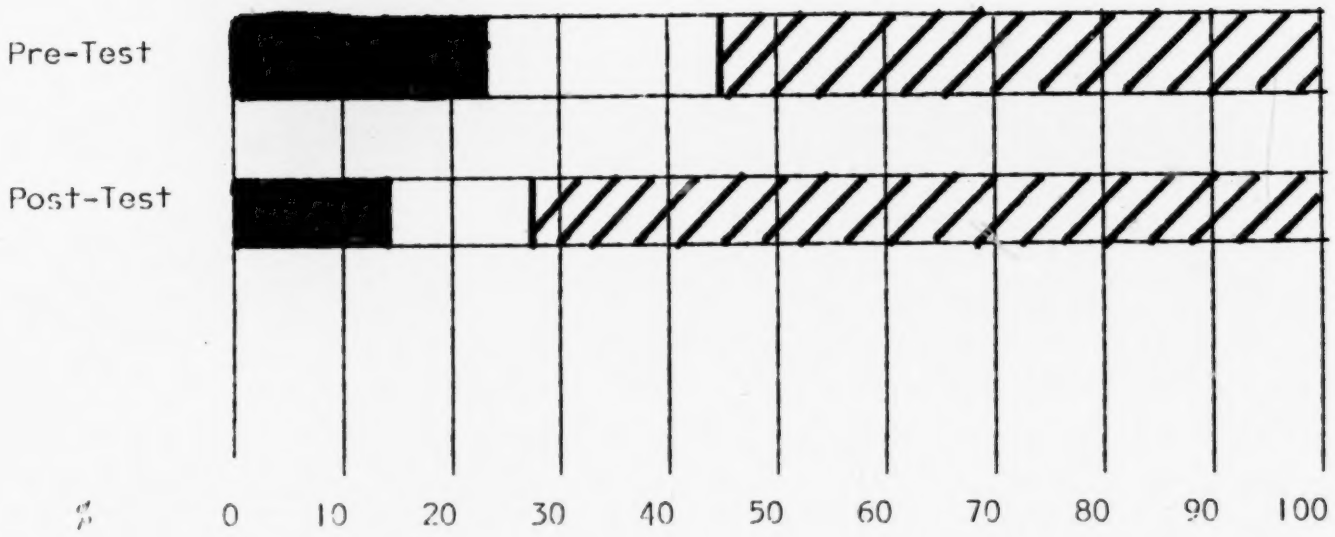


≤ 1 year behind grade level

1.1-1.9 years behind grade level

≥ 2.0 years bebind grade level

Fig. 5. Distribution of fifth grade pupils behind in grade level on the comprehension section of the reading sub-test of the California Test of Basic Skills.



≤ 1 year behind grade level

1.1-1.9 years behind grade level

≥ 2.0 years behind grade level

Fig. 6. Distribution of sixth grade pupils behind in grade level on the comprehension section of the reading sub-test of the California Test of Basic Skills.

Tables 3-8 are contingency tables designed to examine possible shifts in achievement among component pupils from pre-test to post-test. The vertical axis of the tables divide the results of the pre-test into three criteria: the percentage of pupils who achieved one or less years below grade level, the percentage of pupils who achieved between 1.1 and 1.9 years below grade level, and the percentage of pupils who achieved two or more years below grade level.

The horizontal axis of the tables divide the results of the post-test into three similar criteria: the percentage of pupils who achieved one or less years below grade level, the percentage of pupils who achieved between 1.1 and 1.9 years below grade level, and the percentage of pupils who achieved two or more years below grade level.

If a diagonal line is drawn from the upper left to the lower right of the tables, the cells of the tables on the line contain the percentages of component pupils who demonstrated no gain in achievement in relation to the three criteria. Those cells in the tables which are left of the diagonal line contain the percentages of component pupils who demonstrated improvement in achievement in relation to the three criteria. Those cells in the tables which are right of the diagonal line contain the percentages of component pupils who demonstrated regression in achievement in relation to the three criteria.

Figures 3-5 are contingency tables for grades four, five and six in vocabulary. In the fourth grade, improvement appeared to be steady across the groups. However, in the fifth and sixth grades, a high percentage of pupils who were between 1.1 and 1.9 years behind in grade level on the pre-test were two or more years behind on the post-test. The fifth grade had 34.9 percent of the pupils display this regression, and the sixth grade had 17.3 percent display this regression. In grades five and six a high percentage of pupils remained two or more years behind expected grade level achievement.

Figures 6-8 display comprehension in a similar manner. Once again, in all three grades, a high percentage of pupils remained two or more years behind in grade level. Also, more pupils between 1.1 and 1.9 years behind in grade level on the pre-test were falling further behind instead of gaining. In fact, 28.9 percent of the fifth grade component pupils regressed from 1.1-1.9 years behind in expected grade level to two or more years behind expected grade level in the area of comprehension.

TABLE 3

PRE-TEST - POST-TEST PERCENTAGES OF COMPONENT FOURTH GRADE PUPILS BELOW EXPECTED GRADE LEVEL ACHIEVEMENT SCORES ON THE CALIFORNIA TEST OF BASIC SKILLS, READING SUB-TEST VOCABULARY SECTION

		Post-Test		
	Achievement	One or Less Years Below	1.1 to 1.9 Years Below	Two or More Years Below
Pre-Test	One or Less Years Below	16.0%	17.8%	3.5%
	1.1 to 1.9 Years Below	18.3%	22.8%	5.8%
	Two or More Years Below	4.3%	7.8%	4.0%

Total N = 400

TABLE 4

PRE-TEST - POST-TEST PERCENTAGES OF
COMPONENT FIFTH GRADE PUPILS
BELOW EXPECTED GRADE LEVEL
ACHIEVEMENT SCORES ON THE CALIFORNIA
TEST OF BASIC SKILLS, READING SUB-TEST
VOCABULARY SECTION

		Post-Test		
Achievement		One or Less Years Below	1.1 to 1.9 Years Below	Two or More Years Below
Pre-Test	One or Less Years Below	7.3%	8.1%	5.7%
	1.1 to 1.9 Years Below	4.9%	17.3%	34.9%
	Two or More Years Below	1.4%	3.5%	17.0%

Total N = 370

TABLE 5

PRE-TEST - POST-TEST PERCENTAGES OF
COMPONENT SIXTH GRADE PUPILS
BELOW EXPECTED GRADE LEVEL
ACHIEVEMENT SCORES ON THE CALIFORNIA
TEST OF BASIC SKILLS, READING SUB-TEST
VOCABULARY SECTION

	Achievement	Post-Test: One or Less Years Below	Post-Test: 1.1 to 1.9 Years Below	Post-Test: Two or More Years Below
Pre-Test	One or Less Years Below	11.2%	5.4%	6.4%
Pre-Test	1.1 to 1.9 Years Below	3.2%	5.1%	17.3%
Pre-Test	Two or More Years Below	1.9%	6.4%	43.1%

Total N = 313

TABLE 6

PRE-TEST - POST-TEST PERCENTAGES OF COMPONENT FOURTH GRADE PUPILS BELOW EXPECTED GRADE LEVEL ACHIEVEMENT SCORES ON THE CALIFORNIA TEST OF BASIC SKILLS, READING SUB-TEST COMPREHENSTON SECTION

Achievement		Post-Test		
		One or Less Years Below	1.1 to 1.9 Years Below	Two or More Years Below
Pre-Test	One or Less Years Below	10.8%	14.5%	10.0%
	1.1 to 1.9 Years Below	6.8%	15.3%	13.5%
	Two or More Years Below	4.3%	11.0%	14.0%

Total N = 400

TABLE 7

PRE-TEST - POST-TEST PERCENTAGES OF
COMPONENT FIFTH GRADE PUPILS
BELOW EXPECTED GRADE LEVEL
ACHIEVEMENT SCORES ON THE CALIFORNIA
TEST OF BASIC SKILLS, READING SUB-TEST
COMPREHENSION SECTION

Achievement		Post-Test		
		One or Less Years Below	1.1 to 1.9 Years Below	Two or More Years Below
Pre-Test	One or Less Years Below	8.1%	4.6%	4.9%
	1.1 to 1.9 Years Below	4.1%	13.5%	28.9%
	Two or More Years Below	3.0%	5.7%	27.3%

Total N = 370

TABLE 8

PRE-TEST - POST-TEST PERCENTAGES OF
COMPONENT SIXTH GRADE PUPILS
BELOW EXPECTED GRADE LEVEL
ACHIEVEMENT SCORES ON THE CALIFORNIA
TEST OF BASIC SKILLS, READING SUB-TEST, COMPREHENSION SECTION

Achievement		Post-Test		
		One or Less Years Below	1.1 to 1.9 Years Below	Two or More Years Below
Pre-Test	One or Less Years Below	8.9%	4.8%	9.3%
	1.1 to 1.9 Years Below	2.9%	5.1%	14.4%
	Two or More Years Below	1.9%	2.8%	48.9%

Total N = 313

The preceding evaluation of Objective 2 apparently contradicts the results on Objective 1. However, a closer examination of the data reveals that the findings on both objectives are compatible. The reasons for this compatibility are the criterion of Objective 1, the examination of Objective 2, and the post-test effect.

The criterion for Objective 1 was the percentage of component enrollees who surpassed expected levels of grade placement in one or two reading achievement areas. Expected grade placement is deceptive. It is the average yearly progress of the pupil, that is, a pupil in fourth grade who scores a 2.4 on the pre-test has to achieve over .6 on the post-test to be successful. If a pupil in the sixth grade achieves a 2.4 on the pre-test, he has only to improve on the post-test .4 to be successful. Therefore, this inverse relationship of grade level and expected grade placement assumes that pupils learn at a linear rate.

If a sixth grader pre-tests at 2.4 then he is 3.6 years behind his grade level. If he achieves 3.4 on the post-test, he is termed successful by criterion of Objective 1, but he is still 3.5 years behind in grade level. Therefore, many pupils who demonstrated no change in Figures 7-12 were successful under the criterion of Objective 1.

A testing effect could also have caused the regression among the pupils. The pupils were tested twice with the California Test of Basic Skills and three times with the Gates-MacGinitie Reading Test or Nelson Reading Test over the school year. This over-testing and the fact that the California Test of Basic Skills post-test was in May could have demoralized the pupils.

Objective 3. To help the intermediate level (grades 4-6) underachieving pupil develop more positive motivations toward reading.

Criterion: The pupil will perform classroom learning activities at an increased frequency.

An instrument was prepared and administered to classroom teachers who had pupils in the program. However, complications during the post- administration made it impossible to obtain adequate data for measuring the objective.

Additional Analysis:

A further examination of the achievement data was conducted for the Intermediate and Secondary Language Development Component. The objective of the examination was to identify the amount of achievement of pupils during Cycle 1 and Cycle 2 of the component. Another objective of the examination was to compare the amount of pupil improvement during each cycle.

INSTRUMENTATION

Instrumentation included the Gates-MacGinite Reading Test (Grade 4) and the Nelson Reading Test (Grades 5-8). The sample was all component enrollees and the instruments were administered in September, 1969, January, 1970, and May, 1970. Cycle 1 was the time period September, 1969-January, 1970. Cycle 2 was the time period January, 1970-May, 1970.

The analysis of the achievement data obtained by the instrumentation included frequency distributions and contingency (change) distributions.

To analyze the data, four levels were defined the way the Ohio State Department of Education defines levels of improvement for the Annual Evaluation of Title I, Fiscal Year 1970.

Marked Improvement - When a child gains 8 months or more in grade level on a standardized test in the course of 5 month program, he is said to have "marked improvement."

Improvement - When a student gains between 6 and 7 months in grade level on a standardized test in the course of a 5 month program, he is said to have made "improvement."

Some Improvement - When a child gains between 3 and 5 months in grade level on a standardized test in the course of a 5 month program, he is said to have made "some improvement."

Little or No Improvement - If a child gains 2 months or less in grade level on a standardized test in the course of a 5 month program, he is said to have made "little or no improvement."

With these definitions, the growth of pupils in vocabulary and comprehension during Cycle 1 and Cycle 2 of the component can be examined.

Tables 9 and 11 summarize the degree of improvement of component pupils in vocabulary. Table 3 illustrates the degree of improvement during Cycle 1, and Table 5 illustrates the same for Cycle 2.

Tables 10 and 12 summarize the degree of improvement of component pupils in comprehension. Table 4 illustrates the degree of improve-

ment during Cycle 1, and Table 6 illustrates the same for Cycle 2.

Cycle 1: In examining Table 9, with one exception, the pattern of improvement in vocabulary from highest frequency to lowest frequency is little or no improvement, marked improvement, some improvement, improvement. That is, in the fourth grade, the highest frequency (148) occurred in the category little or no improvement. The next highest frequency (114) in the fourth grade occurs at marked improvement. This is followed by some improvement (66) and, finally, improvement (30).

This pattern is similar in grades five and six. However, grade eight does not follow the pattern of the other grades. The highest frequency of pupils (111) occurred in the category of marked improvement. This was followed in descending order by little or no improvement (54), some improvement (30) and improvement (16).

TABLE 9

FREQUENCY COUNT OF THE AMOUNT OF IMPROVEMENT FROM SEPTEMBER, 1969 TO JANUARY, 1970 (CYCLE 1) OF TWO CYCLE PARTICIPANTS IN THE INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT COMPONENT ON EITHER THE GATES-MACGINITE READING TEST OR NELSON READING TEST VOCABULARY SECTION, FOR THE REGULAR SCHOOL YEAR, 1969-70

	Frequency				
Grade	Marked Improvement	Improvement	Some Improvement	Little or No Improvement	Total
4	114	30	66	148	358
5	82	29	57	122	290
6	73	23	36	107	239
8	111	16	30	54	211
Total	380	98	189	431	1098

In examining Table 10, it is apparent more component pupils during Cycle I in comprehension demonstrated marked improvement than any other type of improvement.

During Cycle I, in comprehension, in decreasing order of frequency, the component pupils in all grades demonstrated marked improvement, little or no improvement, some improvement and improvement.

At the end of Cycle I, the range of differences of frequencies between pupils demonstrating marked improvement and pupils demonstrating little or no improvement in grades four, five and six is small. In grade four, sixteen more pupils achieved marked improvement than little or no improvement. The difference in grades five and six between pupils demonstrating marked improvement and pupils demonstrating little or no improvement was thirty-one and twenty-four respectively.

At the end of Cycle I nearly three times the number of eighth grade component pupils achieved marked improvement in comprehension than the number of eighth grade component pupils achieving little or no improvement.

TABLE 10

FREQUENCY COUNT OF THE AMOUNT OF IMPROVEMENT FROM SEPTEMBER, 1969 TO JANUARY, 1970 (CYCLE 1) OF TWO CYCLE PARTICIPANTS IN THE INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT COMPONENT ON EITHER THE GATES-MACGINITE READING TEST OR NELSON READING TEST, COMPREHENSION* SECTION, FOR THE REGULAR SCHOOL YEAR, 1969-70

	Frequency				
Grade	Marked Improvement	Improvement	Some Improvement	Little or No Improvement	Total
4	132	38	63	116	349
5	129	21	39	98	287
6	105	21	24	81	231
8	127	20	18	46	211
Total	493	100	144	341	1078

* Comprehension is termed "Paragraph" in the Nelson Reading Test.

Cycle 2: During Cycle 2 in vocabulary, the frequency pattern in improvement varied grade by grade (Table 11). In grades four and eight, the highest frequency occurred in little or no improvement. After this, the descending order of frequency was marked improvement, some improvement, and improvement.

In fifth and sixth grades, in vocabulary a greater number of component pupils demonstrated marked improvement. After this, in descending order of frequency, pupils demonstrated little or no improvement, some improvement,and improvement.

During Cycle 2, more component pupils in every grade demonstrated little or no improvement in comprehension than in any other improvement area (Table 12). Over half the component pupils in the fourth and fifth grades showed little or no improvement. Between forty and fifty percent of the component pupils in sixth and eighth grade demonstrated the same results.

Cycle 1 and Cycle 2: During Cycle 1 in vocabulary, 350 component pupils demonstrated marked improvement, 98 component pupils demonstrated improvement, 189 component pupils demonstrated some improvement, and 431 component pupils demonstrated little or no improvement.

During Cycle 1 in comprehension, 493 component pupils demonstrated marked improvement, 100 component pupils demonstrated improvement, 144 component pupils demonstrated some improvement and 311 component pupils demonstrated little or no improvement.

During Cycle 2 in comprehension, 312 component pupils demonstrated marked improvement, 86 component pupils demonstrated improvement, 150 component pupils demonstrated some improvement and 530 component pupils demonstrated little or no improvement.

The frequencies by grade level in Tables 9-12 were converted into percentages. The percentages were graphed and appear in Figures 7-10. With the graphs, a better comparison can be made by grade level of the amount of improvement in each cycle in both vocabulary and comprehension. Figures 7-10 are graphic displays of Tables 9-12. Therefore, any explanation of the graphs would be redundant information.

In examining differences and similarities of pupil improvement in achievement in vocabulary and comprehension between Cycle 1 and Cycle 2 of the component, the data revealed that most of the component pupils did not improve at a consistent rate. Component pupils who demonstrated marked improvement during one cycle demonstrated a lesser amount of improvement during the other cycle. On the other hand, component pupils showing little improvement in one cycle showed great improvement during the other cycle.

TABLE 11

FREQUENCY COUNT OF THE AMOUNT OF IMPROVEMENT FROM JANUARY, 1970 TO MAY, 1970 (CYCLE 11) OF TWO CYCLE PARTICIPANTS IN THE INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT COMPONENT ON EITHER THE GATES-MACGINITE READING TEST OR NELSON READING TEST, VOCABULARY SECTION, FOR THE REGULAR SCHOOL YEAR, 1969-70.

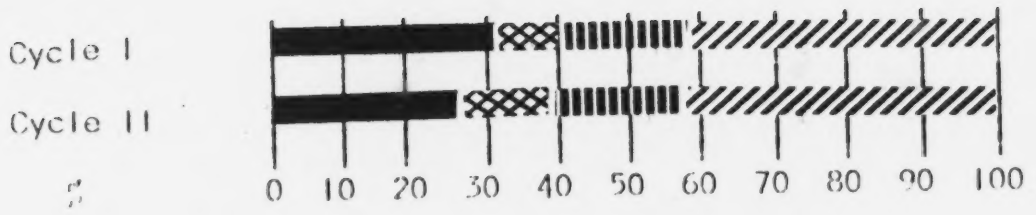
	Frequency				
Grade	Marked Improvement	Improvement	Some Improvement	Little or No Improvement	Total
4	98	40	66	154	358
5	102	36	59	93	290
6	87	33	44	75	239
8	79	15	26	91	211
Total	366	124	195	413	1098

TABLE 12

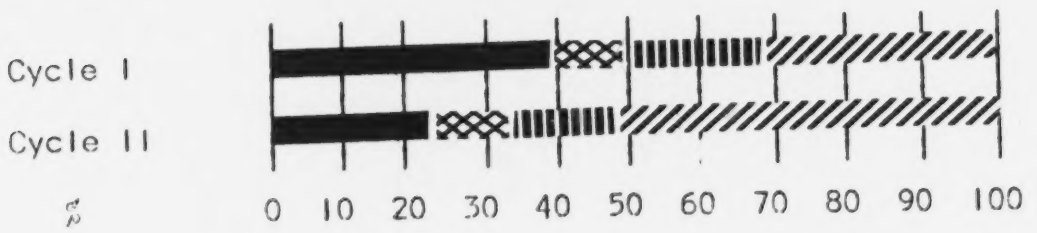
FREQUENCY COUNT OF THE AMOUNT OF IMPROVEMENT FROM JANUARY, 1970 TO MAY, 1970 (CYCLE 11) OF TWO CYCLE PARTICIPANTS IN THE INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT COMPONENT ON EITHER THE GATES-MACGINITE READING TEST OR NELSON READING TEST COMPREHENSION* SECTION, FOR THE REGULAR SCHOOL YEAR, 1969-70

	Frequency				
Grade	Marked Improvement	Improvement	Some Improvement	Little or No Improvement	Total
4	80	37	50	182	349
5	75	23	39	150	287
6	79	17	34	101	231
8	78	9	27	97	211
Total	312	86	150	530	1078

* Comprehension is termed "Paragraph" in the Nelson Reading Test.



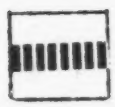
Fourth Grade: Vocabulary



Fourth Grade: Comprehension

Marked Improvement

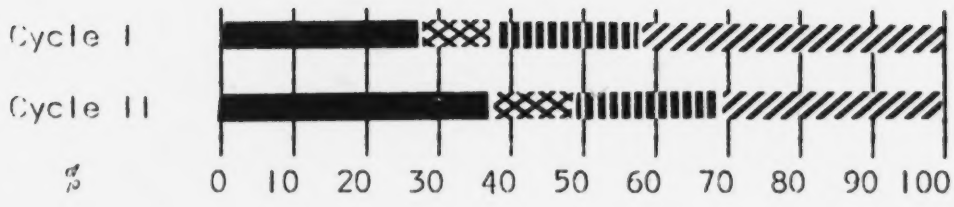
Improvement



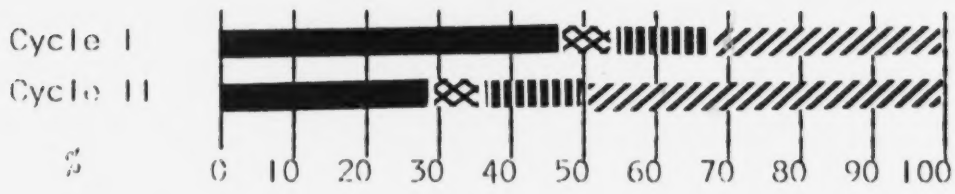
Some Improvement

No Improvement

Fig. 7. Distribution of the amount of improvement by cycle for fourth grade pupils on the vocabulary and comprehension section of the Gates MacGinite Reading Test for school year 1969-70.



Fifth Grade: Vocabulary



Fifth Grade: Comprehension*

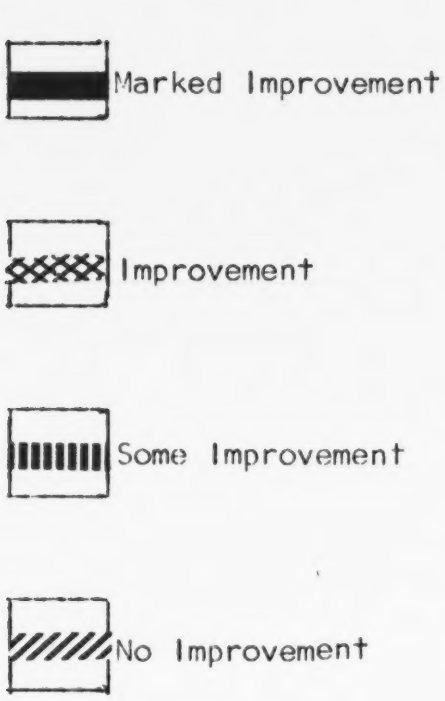
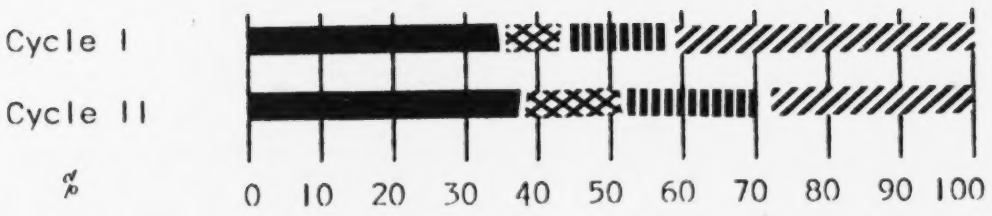
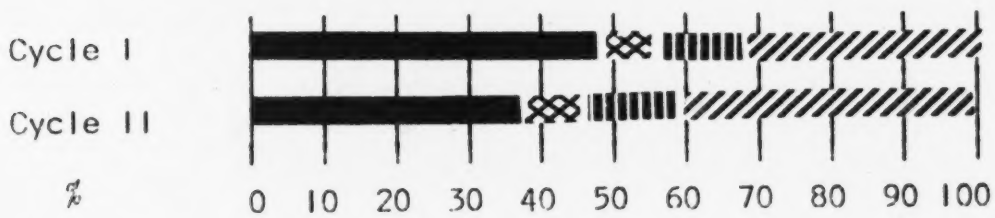


Fig. 8. Distribution of the amount of improvement by cycle for fifth grade pupils on the vocabulary and paragraph* section of the Nelson Reading Test for school year 1960-70.

* Paragraph is synonymous with comprehension in this case.



Sixth Grade: Vocabulary



Sixth Grade: Comprehension*

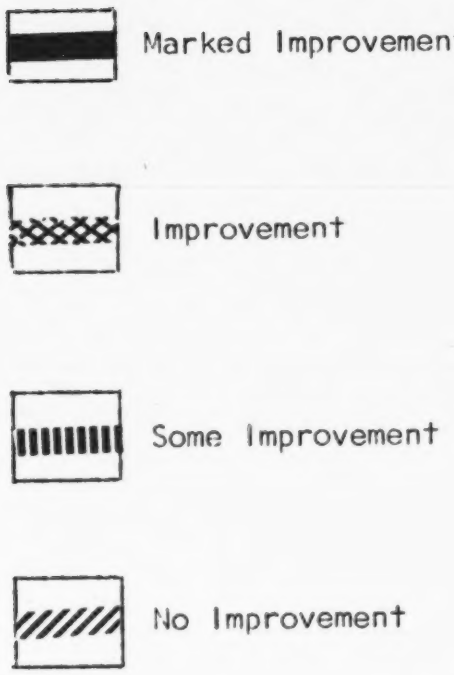


Fig. 9. Distribution of the amount of improvement by cycle for sixth grade pupils on the vocabulary and paragraph* section of the Nelson Reading Test for school year 1969-70.

* Paragraph is synonymous with comprehension in this case.

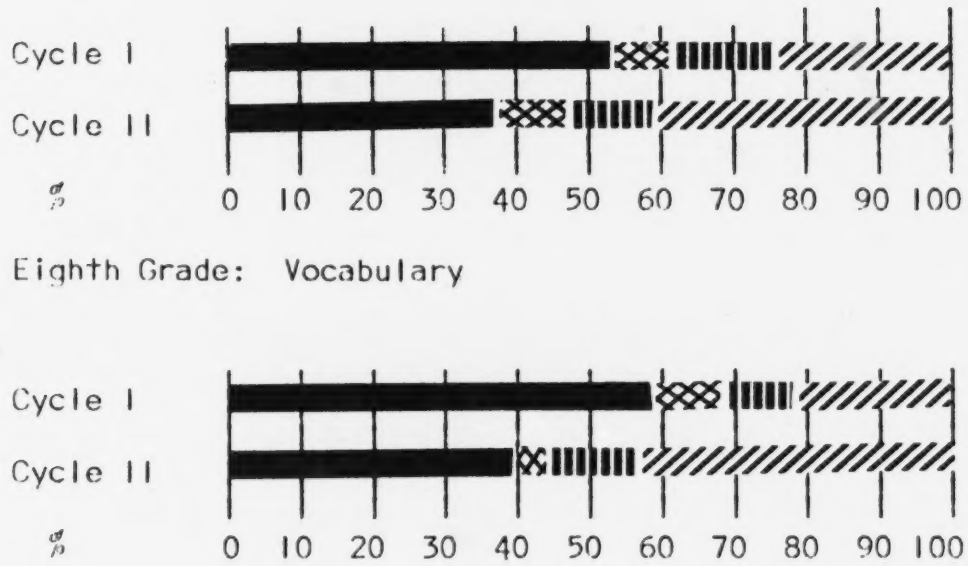


Fig. 10. Distribution of the amount of improvement by cycle for eighth grade pupils on the vocabulary and paragraph* section of the Nelson Reading Test for school year 1969-70.

* Paragraph is synonymous with comprehension in this case.

Tables 13-20 summarize and display the fact that many component pupils who demonstrated marked improvement during Cycle 1 in either vocabulary or comprehension demonstrated little or no improvement during Cycle 2. The tables also display conversely that many component pupils who demonstrated little or no improvement in either vocabulary or comprehension in Cycle 1 demonstrated marked improvement in Cycle 2. In addition to the above, of the component pupils who had achieved some improvement and improvement during Cycle 1 in either vocabulary or comprehension many of them either demonstrated marked improvement or little or no improvement. In other words, there appears to be only a small percentage of pupils consistent from one cycle to another.

Two hypotheses could explain the inconsistency of improvement in component pupils. One hypothesis is that a testing effect caused a negative reaction in many students and, therefore, a loss in performance is expected. This could have happened because the pupils were tested 5 times--twice with the California Test of Basic Skills, three times with the Gates-MacGinite Reading Test or Nelson Reading Test. However, many pupils improved their performance during Cycle 2. The five testing periods did not affect them. Therefore, this hypothesis is rejected.

The second hypothesis concerns individual pupil readiness and individual pupil response to different teaching techniques. When a pupil acquires new skills, he is psychologically and physically ready to acquire it. Different teaching techniques stimulate the pupil either positively or negatively. The pupil reacts to the teaching method and either acquires or does not acquire the new skill. Because the data reflects the variability of individual pupil improvement in Cycle 1 and Cycle 2, the second hypothesis is reasonable.

TABLE 13

THE PERCENTAGE AND AMOUNT OF IMPROVEMENT
OF FOURTH GRADE COMPONENT PUPILS IN VOCABULARY
DURING CYCLE 1 AND CYCLE 2 OF THE
INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT
COMPONENT OF THE REGULAR SCHOOL YEAR, 1969-70

Improvement During Cycle 2	Improvement During Cycle 1			
	Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Marked Improvement	5.3%	2.0%	5.9%	14.2%
Improvement	2.5%	0.6%	1.1%	7.0%
Some Improvement	6.4%	1.4%	2.5%	8.1%
Little or No Improvement	17.6%	4.5%	8.9%	12.0%

Total N = 358

TABLE 15

THE PERCENTAGE AND AMOUNT OF IMPROVEMENT
OF SIXTH GRADE COMPONENT PUPILS IN VOCABULARY
DURING CYCLE 1 AND CYCLE 2 OF THE
INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT
COMPONENT OF THE REGULAR SCHOOL YEAR, 1969-70

		Improvement During Cycle 1			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Improvement During Cycle 2	Marked Improvement	5.9%	2.1%	3.3%	25.1%
	Improvement	3.8%	1.3%	1.7%	7.1%
	Some Improvement	6.7%	2.1%	3.3%	6.3%
	Little or No Improvement	14.2%	4.2%	6.7%	6.3%

Total N = 239

TABLE 16

THE PERCENTAGE AND AMOUNT OF IMPROVEMENT
OF EIGHTH GRADE COMPONENT PUPILS IN VOCABULARY
DURING CYCLE 1 AND CYCLE 2 OF THE
INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT
COMPONENT OF THE REGULAR SCHOOL YEAR, 1969-70

Improvement During Cycle 2	Improvement During Cycle 1			
	Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Marked Improvement	14.7%	2.8%	5.2%	14.7%
Improvement	2.8%	0.9%	1.4%	1.9%
Some Improvement	4.3%	2.4%	2.8%	2.8%
Little or No Improvement	30.8%	1.4%	4.7%	6.2%

Total N = 211

TABLE 17

THE PERCENTAGE AND AMOUNT OF IMPROVEMENT
OF FOURTH GRADE COMPONENT PUPILS IN COMPREHENSION
DURING CYCLE 1 AND CYCLE 2 OF THE
INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT
COMPONENT OF THE REGULAR SCHOOL YEAR, 1969-70

Improvement During Cycle 2	Improvement During Cycle 1			
	Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Marked Improvement	5.7%	3.4%	3.2%	10.6%
Improvement	3.2%	1.1%	1.7%	4.6%
Some Improvement	5.2%	2.0%	4.0%	3.2%
Little or No Improvement	23.8%	4.3%	9.2%	14.9%

Total N = 349

TABLE 18

THE PERCENTAGE AND AMOUNT OF IMPROVEMENT
OF FIFTH GRADE COMPONENT PUPILS IN COMPREHENSION
DURING CYCLE 1 AND CYCLE 2 OF THE
INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT
COMPONENT OF THE REGULAR SCHOOL YEAR, 1969-70

		Improvement During Cycle 1			
Improvement During Cycle 2		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
	Marked Improvement	6.6%	2.1%	3.5%	13.9%
	Improvement	2.8%	1.0%	2.1%	2.1%
	Some Improvement	4.5%	0.7%	2.4%	5.9%
	Little or No Improvement	31.0%	3.5%	5.6%	12.2%

Total N = 287

TABLE 19

THE PERCENTAGE AND AMOUNT OF IMPROVEMENT
OF SIXTH GRADE COMPONENT PUPILS IN COMPREHENSION
DURING CYCLE 1 AND CYCLE 2 OF THE
INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT
COMPONENT OF THE REGULAR SCHOOL YEAR, 1969-70

		Improvement During Cycle 1			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Improvement During Cycle 2	Marked Improvement	8.2%	3.5%	3.9%	18.6%
	Improvement	4.3%	0.4%	1.7%	0.9%
	Some Improvement	6.1%	1.7%	1.3%	5.6%
	Little or No Improvement	26.8%	3.5%	3.5%	10.0%

Total N = 231

TABLE 20

THE PERCENTAGE AND AMOUNT OF IMPROVEMENT
OF EIGHTH GRADE COMPONENT PUPILS IN COMPREHENSION
DURING CYCLE 1 AND CYCLE 2 OF THE
INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT
COMPONENT OF THE REGULAR SCHOOL YEAR, 1969-70

		Improvement During Cycle 1			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Improvement During Cycle 2	Marked Improvement	16.6%	2.4%	4.3%	13.7%
	Improvement	1.9%	1.4%	0.5%	0.5%
	Some Improvement	7.6%	1.9%	0.9%	2.4%
	Little or No Improvement	34.1%	3.8%	2.8%	5.2%

Total N = 211

2. Section B - Summer School, 1970

a. Description of the Summer Component

The summer project was an expanded instructional approach to the regular language development project.

The instructional efforts were directed toward:

1. Improving the reading achievement of pupils by extending creative writing skills, speaking skills, listening skills and reading skills as indicated by test scores.

2. Improving pupils' attitudes toward reading as exhibited by such behaviors as increased activity in learning through reading, reading for pleasure, and independent reading.

Intermediate and secondary age students attended the summer project for six (6) weeks, for three (3) hours per day, for five (5) days per week. Teachers were employed for seven weeks on a half-time (50% time) schedule - 20 hours per week.

The project was designed for underachievers presently in grades 4, 5, 6, 7, and 8 who participated in the regular school program and other underachievers as stated in the section - Description of Students. Five teachers (2 reading, 2 creative expression, and 1 art) cooperated as a team. The strategy was to present a multi-media approach to reading utilizing the skills of several staff members.

One team was intended to serve up to 40 students in each of the 25 units. The project was to serve approximately 1,000 students. The pupil-teacher ratio was intended to be approximately 8 to 1.

b. Description of the Students (Grades 4-8)

Approximately 1,000 (25 classes) intermediate and secondary educationally disadvantaged students who have the greatest discrepency between their present achievement in language and their potential in language were to be selected for the proposed project if their achievement was six (6) months or more below their grade level placement. Students were selected from the designated priority school attendance areas qualified for participation in Title I ESEA Projects. The elementary schools were Beatty Park, Beck, Douglas, Eleventh Avenue, Fair Avenue, Felton, Fulton, Garfield, Hamilton, Lincoln Park, Livingston, Main Street, Milo, Ohio Avenue, Reeb Avenue, Sullivant, Trevitt, Weinland Park and Windsor. The junior high schools included: Champion, Everett, Franklin, Monroe and Starling.

Windsor was the only school with two classes.

Emphasis was placed upon selecting present sixth and seventh grade students who were in greatest need of further language opportunities. Other students who were in the fourth, fifth and eighth grades were considered after the sixth and seventh grade students were selected. All students were selected on the basis of (1) classroom teacher judgment and records, (2) intermediate and secondary language development teacher judgment and records, (3) achievement and scholastic data when available, and (4) pre-test evaluation when needed.

c. Description of Staff

The personnel was as follows:

Each school (unit) was staffed by a team of 5 teachers. One aide was employed for each art teacher. All staff members, except the project chairman, were employed for seven (7) weeks.

One project chairman and one assistant project chairman were employed for 8 weeks - 100% time schedule (40 hour week). Their duties were to assume the general instructional and administrational responsibilities for the total component. Duties performed were:

1. To organize a continuous in-service education program.

2. To review and coordinate the selection of students.

3. To coordinate activities with the evaluation staff to insure proper evaluation of the component.

4. To keep adequate records for proper accountability of the component.

The component employed 125 teachers for 7 weeks - 50% time schedule (20 hours per week). The duties of the teachers were to develop a program of instruction utilizing the media of creative writing (creative expression), art, and language development techniques. A unified instructional approach by the team was tailored to the unique needs of the students selected. Other duties were:

1. To maintain adequate records and to participate in the evaluation of the component.

2. To participate in in-service education.

3. To develop techniques to inform parents of the program and

to encourage parents to become involved in the education of their children.

Twenty-nine teacher aides were employed for 7 weeks - 50% time schedule (20 hours per week). The duties of the teacher assistant were to serve, under the direction of the art teacher, in supportive activities, including helping with the physical details of the classroom operation.

One art coordinator was employed for 8 weeks - 50% time schedule (20 hour week). The duties of the art coordinator were:

1. To organize and coordinate the program of art for the summer interim.

2. To prepare or make available, under the supervision of the project chairman, selected materials for the component.

d. Findings

Objective 1. To help the underachieving pupil improve his reading achievement.

Criterion: No criterion was stated. The objective was evaluated by examining the amount of improvement in achievement from pre-test to post-test.

INSTRUMENTATION

Gates-MacGinite Reading Test (Grade 4)
Nelson Reading Test (Grades 5-8)

Sample: All summer school component enrollees

Administration: The test was administered in September, 1969, May, 1970, and July, 1970.

Analysis: Frequency distributions, and contingency tables by grade level and grade placement.

Results: To examine the effectiveness of the Summer School Intermediate and Secondary Language Development Program, four levels of improvement were defined. The source of the definitions was the Ohio State Department of Education's Annual Evaluation of Title 1, Fiscal Year 1970:

Marked Improvement - When a child gains 3 months or more

in grade level on a standardized test in the course of 1.5 month program, he is said to have made "marked improvement."

Improvement - When a student gains 2 months in grade level on a standardized test in the course of 1.5 month program, he is said to have made "improvement."

Some Improvement - When a child gains 1 month in grade level on a standardized test in the course of 1.5 month program, he is said to have made "some improvement."

Little or No improvement - If a child demonstrates no gains in grade level on a standardized test during the course of 1.5 month program, he is said to have made "little or no improvement."

With these definitions of improvement, summer school data was grouped into frequency distributions, Tables 21, 22.

Marked improvement occurred more in comprehension than in vocabulary. Fifty-six component enrollees had marked improvement in comprehension, and thirty-seven component pupils had marked improvement in vocabulary.

The results of having more improvement in comprehension than vocabulary supports the creative expression approach of the summer school component. However, conclusions about the effect of summer school with this data have to be reserved. While there was marked improvement in a minority of component pupils, the majority of them had little or no improvement. In vocabulary 87 of 135 component pupils demonstrated little or no improvement. In comprehension, 86 of 153 component pupils demonstrated little or no improvement.

To further examine the summer school component, contingency tables were made to demonstrate the relationship of the amount of improvement within each cycle and the amount of improvement in summer school. Cycle 1 was the time period, September, 1969-January, 1970. Cycle 2 was the time period, January, 1970-June, 1970. Summer school went from June, 1970-August, 1970.

Tables 23-34 display the relationship of improvement within one of the cycles and the improvement in summer school. In vocabulary in both cycles (Tables 23-28) a majority of the pupils were in one of the three following categories:

1. the pupil demonstrated marked improvement during the cycle and little or no improvement during summer school.

2. the pupil demonstrated little or no improvement in both the cycle and summer school.

3. the pupil demonstrated little or no improvement during the cycle and marked improvement during summer school.

TABLE 21

FREQUENCY COUNT OF THE AMOUNT OF IMPROVEMENT FROM PRE-TEST TO POST-TEST OF PARTICIPANTS IN THE INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT COMPONENT ON THE GATES-MACGINITE READING TEST (GRADE 4) OR NELSON READING TEST (GRADES 5,6), VOCABULARY SUB-TEST, MAY 1970-JULY, 1970

	Frequency				
Grade	Marked Improvement	Improvement	Some Improvement	Little or No Improvement	Total
4	20	3	3	46	72
5	12	1	2	21	36
6	5	0	2	20	27
Total	37	4	7	87	135

TABLE 22.

FREQUENCY COUNT OF THE AMOUNT OF IMPROVEMENT FROM PRE-TEST TO POST TEST OF PARTICIPANTS IN THE INTERMEDIATE AND SECONDARY LANGUAGE DEVELOPMENT COMPONENT ON THE GATES-MACGINITE READING TEST (GRADE 4) OR NELSON READING TEST (GRADES 5,6), COMPREHENSION* SUB-TEST MAY, 1970-JULY, 1970

	Frequency				
Grade	Marked Improvement	Improvement	Some Improvement	Little or no Improvement	Total
4	26	4	4	42	76
5	17	1	0	29	47
6	13	0	2	15	30
Total	56	5	6	86	153

* Comprehension is termed "Paragraph" in the Nelson Reading Test.

TABLE 23.

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN VOCABULARY OF FOURTH GRADE PUPILS BETWEEN CYCLE I OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

Amount of Improvement		Cycle I			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	5	3	1	10
	Improvement	0	0	0	3
	Some Improvement	2	0	0	1
	Little or No Improvement	11	3	5	19

TABLE 24.

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN VOCABULARY OF FOURTH GRADE PUPILS BETWEEN CYCLE 2 OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

Amount of Improvement		Cycle 2			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	3	1	5	11
	Improvement	0	0	1	2
	Some Improvement	1	0	0	2
	Little or No Improvement	17	7	8	14

TABLE 25

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN VOCABULARY OF FIFTH GRADE PUPILS BETWEEN CYCLE I OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

	Amount of Improvement	Cycle I			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	3	1	1	3
	Improvement	0	0	0	0
	Some Improvement	0	0	0	0
	Little or No Improvement	5	2	4	7

TABLE 26

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN VOCABULARY OF FIFTH GRADE PUPILS BETWEEN CYCLE 2 OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

Summer School: Amount of Improvement	Cycle 2: Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Marked Improvement	2	2	2	6
Improvement	0	0	0	1
Some Improvement	0	0	2	0
Little or No Improvement	7	3	8	3

TABLE 27

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN VOCABULARY OF SIXTH GRADE PUPILS BETWEEN CYCLE I OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

Amount of Improvement		Cycle I			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	3	0	2	0
	Improvement	0	0	0	0
	Some Improvement	1	0	0	1
	Little or No Improvement	8	2	0	6

TABLE 28

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN VOCABULARY OF SIXTH GRADE PUPILS BETWEEN CYCLE 2 OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

Amount of Improvement		Cycle 2			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	2	0	0	3
	Improvement	0	0	0	0
	Some Improvement	1	0	0	1
	Little or No Improvement	6	5	6	3

In comprehension (Tables 29-34) there were similar relationships and one additional relationship. More pupils in comprehension demonstrated marked improvement in both the cycle and summer school.

The data supports the theory that individual pupils respond individually to different teaching techniques. The individual response on the part of the pupil to the teaching style is displayed in the data. The marked improvement during one type of teaching technique and little or no improvement during another type of teaching technique supports the theory.

The pupils who demonstrated little or no improvement in both the cycle and summer school should not be forgotten. These pupils may need to be instructed differently to have them start improving in reading achievement.

The summer school component was somewhat successful. Pupils who had little or no improvement during the regular year gained markedly in achievement (vocabulary and comprehension) during summer school.

TABLE 29

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN COMPREHENSION OF FOURTH GRADE PUPILS BETWEEN CYCLE I OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

Amount of Improvement		Cycle I			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	12	0	3	7
	Improvement	2	1	0	0
	Some Improvement	0	0	0	3
	Little or No Improvement	12	2	8	13

TABLE 30

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN COMPREHENSION OF FOURTH GRADE PUPILS BETWEEN CYCLE 2 OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

Amount of Improvement		Cycle 2			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	3	2	3	18
	Improvement	0	0	1	3
	Some Improvement	1	1	1	1
	Little or No Improvement	15	6	3	18

TABLE 31

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN COMPREHENSION OF FIFTH GRADE PUPILS BETWEEN CYCLE I OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

	Amount of Improvement	Cycle I			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	7	1	1	2
	Improvement	1	0	0	0
	Some Improvement	0	0	0	0
	Little or No Improvement	6	3	2	9

TABLE 32

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN COMPREHENSION OF FIFTH GRADE PUPILS BETWEEN CYCLE 2 OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

	Amount of Improvement	Cycle 2			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	4	1	2	10
	Improvement	0	0	0	1
	Some Improvement	0	0	0	0
	Little or No Improvement	13	4	1	11

TABLE 33

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN COMPREHENSION OF SIXTH GRADE PUPILS BETWEEN CYCLE I OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

	Amount of Improvement	Cycle I			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	5	0	1	3
	Improvement	0	0	0	0
	Some Improvement	0	0	1	1
	Little or No Improvement	5	3	0	6

TABLE 34

FREQUENCY AND RELATIONSHIP OF THE AMOUNT OF IMPROVEMENT IN COMPREHENSION OF SIXTH GRADE PUPILS BETWEEN CYCLE 2 OF THE COMPONENT AND THE SUMMER SCHOOL COMPONENT

	Amount of Improvement	Cycle 2			
		Marked Improvement	Improvement	Some Improvement	Little or No Improvement
Summer School	Marked Improvement	3	0	2	8
	Improvement	0	0	0	0
	Some Improvement	1	1	0	0
	Little or No Improvement	6	2	3	4

However, the majority of pupils did not demonstrate marked improvement in achievement.

Also, the summer school component was capable of helping more pupils. Of the intended 1,000 pupils that were to be selected, data on a maximum 153 pupils was gathered. Either the component did not evaluate all the pupils or the component did not serve the intended number of pupils.

The 1970 Summer School Intermediate and Secondary Language Development Component was a mild success.

Section IV - Relationships and Indicators

A. Congruence with Objectives

Results which form the basis for the discussion in this section were drawn from the data involving approximately 1,000 to 1,300 pupils. The sample fluctuates because pupils were dropped or added to the program as the component teacher felt necessary. Pupil mobility before the post-test caused a great many pre-test scores to be disregarded. In addition, one school did not report test results, and one school used the wrong instrumentation.

The component also served tenth grade students in one school. Because all elementary schools and junior high schools were grouped in the reporting of the data, the results of the tenth grade in that school are not in this report because it would be unfair to that component class and school. Through simple deduction the identity of the school, teacher, and class would be revealed.

The data was gathered with a sample of well over 1,000 pupils. Therefore, a fair question can be, "How well did the program meet its objectives?"

In answering this question, each objective will be stated for both the 1969-70 regular school year component and the 1970 summer school component. A summary of the data relating to the criterion of the objective will follow.

1. 1969-70 Regular School Year Component

Objective 1. To help the underachieving pupil (Grades 4-12) improve his reading achievement.

Criterion: The degree to which this objective is realized will be the percentage of component enrollees who surpass expected levels of grade placement in one of the two reading achievement areas (vocabulary and comprehension).

The pre-test, post-test analysis of the California Test of Basic Skills reading section indicated that sixty-seven percent of the pupils in the component surpassed normal expectations. The component achieved the objective of raising participants' grade placement level in reading vocabulary and reading comprehension. Of the pupils who achieved above normal expectation, an almost equal number of pupils made gains in reading vocabulary as in reading comprehension.

Objective 2. To help intermediate grade levels (Grades 4-6) underachieving pupil become more successful in his regular reading class work.

Criterion: There is no criterion.

Even though a high number of pupils made great gains in the program, the great majority of pupils were still behind their non-component peers in reading achievement. The low level of achievement of pupils entering the component and the method in which expected grade placement was calculated could have caused this discrepancy. The expected grade placement was the average yearly achievement of the pupil; that is, a fifth grade pupil who had a grade placement pre-test score of 3.5 was expected to achieve .7. Any gains by the child of above .7 was attributed to the program. Pupils in grade six in the component who had a low pre-test score did not have a high expected grade placement score. Therefore, these pupils achieved above expected grade placement, but they were still behind their peers. Thus, at the moment, one should not expect component pupils to be totally successful in classroom reading activities.

Objective 3. To help the intermediate level underachieving pupil develop more positive motivation toward reading.

Criterion: If successful, the pupil will perform classroom learning activities at an increased frequency.

Because of difficulties in the instrumentation and post-test administration, no conclusive results were obtained.

Additional Analysis:

Analysis of the Gates MacGinitie and Nelson Reading Tests demonstrated that there was little difference between the number of pupils who improved in vocabulary in Cycle I and the number of pupils who improved in vocabulary in Cycle 2 of the component. However, more pupils improved in comprehensive skills during Cycle I than during Cycle 2.

In comparing total results of improvement between Cycle I and Cycle 2 in vocabulary, 667 component pupils out of 1098 component

pupils demonstrated at least three months growth in grade level on a standardized test during Cycle 1. During Cycle 2 in vocabulary, 685 component pupils demonstrated at least three months growth in grade level on a standardized test.

In comparing the total results of improvement between Cycle 1 and Cycle 2 in comprehension, 737 component pupils demonstrated at least three months growth on a standardized test during Cycle 1 while 548 component pupils demonstrated at least three months growth on a standardized test during Cycle 2.

In addition, the analysis indicated that component pupils responded individually to the different teaching methods. Only a small number of pupils improved in achievement in either vocabulary or comprehension at a consistent rate.

2. 1970 Summer School

Objective 1. To improve the reading achievement of pupils by extending creative writing skills, speaking skills, listening skills, and reading skills as indicated by test scores.

The data from the summer program indicated that less than one-half of the program pupils improved in achievement in either vocabulary or comprehension. But, most of the pupils that demonstrated marked improvement in the summer program showed little or no improvement during the regular school year program. The data indicates that pupils who are underachieving in reading respond to a variety of instruction. In other words, different pupils respond to different teaching instruction.

Section V - Judgments of Worth

A. Value of Outcomes

The data indicates that a high percentage of component enrollees improved in the achievement areas of vocabulary and comprehension. Because reading transcends all subject areas, it is reasonable to assume that a percentage of enrollees are improving in achievement in other subject areas.

Despite the apparent gains made by many of the component participants, the post-test level of achievement indicates that many of the pupils are still in need of additional instruction. That is, despite the fact that notable gains were made on the California Test of Basic Skills, in many instances the level of achievement is still markedly behind the norms for each grade level. In addition, deficiencies tend to be greater in the upper grade levels.

B. Recommendations

The examination of the data indicate that an approximately equal

number of pupils surpassed expected grade levels in vocabulary and comprehension. Totally, sixty-seven percent of the component enrollees achieved greater than what was expected of them. However, of this sixty-seven percent, a great many of the component pupils were still behind the norms for their grade level. In vocabulary, 61.7 percent of the fourth grade component pupils, 86.5 percent of the fifth grade component pupils, and 83.7 percent of the sixth grade component pupils were greater than one year behind the norms for their grade level after the post-test administration in May, 1970.

In comprehension, the results were similar. The composition of the component pupils greater than one year behind the norms for their grade level on the post-test include 78.3 percent of the fourth graders, 84.9 percent of the fifth graders, and 85.3 percent of the sixth graders.

Recommendation:

Pupils who demonstrated deficiencies at the end of the component school year should continue in Intermediate and Secondary Language Development Component the next school year.

Component pupils did not gain in achievement in comprehension during Cycle 2 as they had during Cycle 1. Of the 493 component pupils who gained greater than seven months in achievement in comprehension during Cycle 1, 306 pupils gained less than three months during Cycle 2.

Recommendation:

Component classroom procedures should be examined to discover why achievement gains in comprehension were lower after the mid-year of the program.

Generalizations about the effectiveness of summer school are limited. Of the nearly 600 pupils in the program, approximately 160 were involved in the evaluation. Illness, pupil summer vacations, and in isolated cases lack of cooperation from both students and teachers hampered the evaluation. The proposal for the summer program indicated an intended student-teacher ratio of 8 to 1. However, during the program the student-teacher ratio was 5 to 1 or less.

Recommendation:

The summer Intermediate and Secondary Language Development Component, if continued, should serve more students.

Recommendation:

If the summer instructional program is repeated, closer cooperation with the Department of Evaluation, Research and Planning is needed in order to assess more adequately the effectiveness of the component.

The summer school component enjoyed limited success. Most of the component pupils who improved in achievement during the summer component demonstrated little or no improvement during the regular school year.

Recommendation:

A review of the classroom techniques of summer school teachers is needed to help improve the regular school year component.